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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,205	01/18/2001	Wayne G. Sainty	HAC-026	4028

7590
David P Gordon
65 Woods End Road
Stamford, CT 06905

06/20/2003

EXAMINER

ANDERSON, BRUCE C

ART UNIT	PAPER NUMBER
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2881

DATE MAILED: 06/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,205

Applicant(s)

SAINTY, WAYNE G. 

Examiner

BRUCE C ANDERSON

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14 and 16-22 is/are rejected.
- 7) ☒ Claim(s) 13 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12, 14, and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman (032) in view of Yoshikawa (222).

Kaufman and Yoshikawa are applied in a similar manner as in the first office action. References to Alexander (364) and GB 2,295,268 have been considered unnecessary in view of applicant's amendment of 5-30-03.

Furthermore, it should be noted that Kaufman does disclose an anode (24) that is cylindrical and has tapering sides towards the cathode (22) (claim 8). In this arrangement the distributor (42) is located behind the anode (opposite the direction of the cathode) with the ion source (20) is operated at ground potential, typically the vacuum chamber potential (col.9, lines 34-37). A channel is formed behind the cylindrical anode which has an outlet that is has at least one aperture leading into the ionization zone. In other words the integral part of the anode adjacent this channel can be considered a central outlet member having at least one aperture. It is noted applicant's has a gas line (58) that is radial to said outlet, as gas apertures (44) of Kaufman are. It is also noted that applicant makes no mention of an outlet that is centrally located with respect to said longitudinal axis in independent claims 14 and 19.

Hence, it is not seen that having a centrally located outlet member substantially adjacent said longitudinal axis, is considered critical to applicant's invention.

Although Kaufman has decided to use a solid conductive means as an anode (col.3, lines 35-38), it is obvious to one of ordinary skill in the art that an anode can alternatively be made of an insulator having a deposit of an oxygen-free metal thereon, as broadly taught by the secondary reference to Yoshikawa (222). For example, Yoshikawa (222) teaches the use of a pair of cylindrical electrodes AA1 and AA2 made of oxygen-free copper on coaxially opposing surfaces of quartz walls Q1 and Q2 (col.4, last paragraph-col.5, first paragraph).

Allowable Subject Matter

3. Claims 13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

What is meant by "wherein the or each of said apertures"?

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **BRUCE C ANDERSON** whose telephone number is 703-308-4851. The examiner can normally be reached on **MON.-FRI. 6:15AM-3:45PM** (off **ALT. FRI.**).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **JOHN LEE** can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-2864 for After Final communications.

Art Unit: 2881

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



BRUCE C ANDERSON
Primary Examiner
Art Unit 2881

BCA
June 17, 2003